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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,939	06/22/2001	Christopher J. Marxen	2001P11061US	7697

7590 06/07/2004
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EXAMINER

NI, SUHAN

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/887,939

Applicant(s)

MARXEN ET AL.

Examiner

Suhan Ni

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. This communication is responsive to the election filed 03/24/2004.
2. A provisional election was made without traverse to prosecute the invention of Group II, claims 1-15 and 17-21. Group I, claim 16 is withdrawn from further consideration by the examiner under 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, it recites the limitation “the step of” in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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4. Claims 1, 3, 5, 8, 12, 13-14, 17 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Topholm et al. (U. S. Pat. - 5,487,012).

Regarding claims 1 and 17, Topholm et al. disclose a method for making a shell for an ITE type hearing device having at least one component, comprising: obtaining a digital representation of a portion of the ear canal (13); creating a digital representation of a shell conforming to the digital representation of the portion of the ear canal (14); and modifying for optimized fitting processing (16) as claimed.

Regarding claims 3, 5, 8 and 13, Topholm et al. further disclose the method for making a shell of an ITE hearing device, wherein the step of modifying modifies the physical dimension of the digital representation of the shell for providing an optimized fitting processing (14-16 and C) as claimed.

Regarding claims 12, 14 and 21, Topholm et al. further disclose the method for making a shell of an ITE hearing device by direct manufacture (D).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 4, 6-7, 9-11, 15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Topholm et al. (U. S. Pat. - 5,487,012).

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Regarding claims 2, 4, 9 and 18-20, Topholm et al. do not clearly teach of reducing the number of points, or pixels/voxels as claimed. Since reducing image resolutions for image processing is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide or set reasonably reduced number of pixels for any port of the image processing, especially in 3-D data formation, rendering, reconstruction, and displaying, in order to effectively and efficiently obtain and process the imaging data for further manufacturing the hearing device.

Regarding claims 6-7, Topholm et al. do not clearly teach of a seamless shell as claimed. Since providing an integrated shell (with a face plate) for a ITE or CIC type hearing aid is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide all related processing for making the integrated shell for the hearing aid as an alternate choice, in order to effectively and efficiently manufacturing the hearing device.

Regarding claims 10-11 and 15, Topholm et al. do not specially teach the details for fitting the shell as claimed. Since pre-fitting a shell of a ITE or CIC type hearing device for a user is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide such pre-fitting process for a user, in order to effectively and efficiently manufacturing a customized hearing device for a specific user.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Suhan Ni** whose telephone number is (703)-308-9322, and the number for fax machine is (703)-305-9508. The examiner can normally be reached on Monday

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through Thursday from 9:00 am to 7:30 pm. If it is necessary, the examiner's supervisor, **Curtis Kuntz**, can be reached at **(703) 305-4708**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is **(703) 305-3900**.

Suhan Ni
Primary Examiner
Art Unit 2643
USPTO


SUHAN NI
PRIMARY EXAMINER

May 30, 2004